COMPARING OF THE EFFECT OF DIALECTICAL BEHAVIOR THERAPY (DBT) AND SCHEMA THERAPY (ST) ON REDUCING MOOD ACTIVITY AND SUICIDAL THOUGHTS IN PATIENTS WITH BORDERLINE PERSONALITY DISORDER

LADAN MOHAMADIZADEH¹, BEHNAM MAKVANDI², REZA PASHA³, SAEID BAKHTIARPOUR², FARIBA HAFEZI²
¹Psychology PhD Candidate, Department of Psychology, Khuzestan Science and Research Branch, Islamic Azad University, Ahvaz, Iran - ²Assistant Professor, Department of Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran

ABSTRACT

Introduction: Borderline personality disorder is known as the most common personality disorder in the field of psychiatry. The aim of this study was to compare the effect of dialectical behavior therapy and schema therapy on mood activity and suicidal thoughts in patients with borderline personality disorder in the city of Qazvin.

Materials and methods: This study in terms of purpose is an applied one and in terms of the method of data collection, can be regarded as pre-experimental and post-experimental semi-experimental study with the control group. The study population included all patients with borderline personality disorder and mood activity and suicidal thoughts who referred to Bou-Ali Hospital in the city of Ghazvin. The sample consisted of 36 students, who were selected by convenience sampling. Of these, 24 patients were randomly divided into two groups, two experimental group including 12 people, and a control group consisting 12 patients. In this study, The Millon Clinical Multiaxial Inventory, The beck Depression Inventory and Scale suicide imagination Mach (SSIM) were used. Patients with the borderline personality disorder who belonged to the experimental group were under intervention for 16 section which takes long 90 minutes sessions in eight consecutive weeks under the controls. Research data was analyzed using multivariate and single factor analysis of covariance, and T-experimental was analyzed for the independent groups.

Results: The results showed that there was a significant difference between dialectical behavior therapy and schema therapy with regard to their effect on mood activity and suicidal thoughts at (0.05> P). The results of the Independent t-experimental also showed that there was no significant difference between dialectical behavior therapy and schema therapy in patients with the borderline personality disorder in terms of the Suicidal thoughts variable at (0.05> P), but there was a significant difference between schema therapy and dialectical behavior therapy in patients with the borderline personality disorder in terms of the mood activity variable at (0.01> P).

Discussion and conclusion: So, we could conclude that dialectical behavior therapy and schema therapy should be effective in reducing mood activity and suicidal thoughts in patients with borderline personality disorder.

Keywords: dialectical behavior therapy, schema therapy, mood activity, suicidal thoughts, borderline personality disorder.

DOI: 10.19193/0393-6384_2017_6_162

Received December 30, 2016; Accepted June 20, 2017

Introduction

Borderline personality disorder which is known as one of the personality disorders, is the most common one in psychiatric settings. The term border is a psychoanalytic term first used for a group of patients who were on the border of neurotic and discrete mental groups¹. The psychiatric Association of America² has described this disorder in this way; it is a pervasive pattern in relation with instability in interpersonal relationships, self-image, and impulsivity mood. It starts in the early adulthood and emerges in different situations. According to the previous studies, the prevalence of borderline personality disorder has been growing in the population from 1 to 2%, and the rate of suicide in people suffering from it is about 10%. The number of women with borderline personality disorder
is two times more than that of men with this disorder.

The main characteristic of borderline personality is emotional instability. Some important features of patients with this disorder are mood activity and suicidal thoughts. These patients are known with downward and upward emotions, instability and anger; they need to communicate and have variable comments in relation to others. Patients with borderline personality disorder even for a brief moment when they are alone, experience emptiness. Despite having romantic and strong relationships, they are heartbroken most of the time. They make efforts without reason, such as committing suicide to avoid losing. Suicidal behaviors are related to a situation in which a person puts himself at the risk, but his suicide attempt is not complete (Like dropping over the bridge and putting the tablets in the mouth but not swallowing them).

They suffer from the problems like mood activity, unsatisfactory relationships with others, impulsive behavior and ambiguous identity. Despite the fact that most patients with borderline personality disorder are intelligent and creative, they rarely, show progress in the development of their talents. The risk of self-injury in people is due to the high self-mutilation or drug abuse. 69 to 75% of people with borderline personality disorder suffer from the self-harm behaviors as well. 69% of them are at a high risk for suicide, and approximately 10% of deaths in this population are as a result of a suicide attempt. To reduce the borderline personality disorder in patients with depression, various treatments have been suggested among which dialectical behavior therapy (DBT) and Schema Therapy (ST) can be named.

DBT is more complex than some other methods, and its success in the treatment of personality disorders, especially BPD and its related traits, has been well proved. This method was invented in 1993 by Marshall Linehan. The model was proposed by dialectical behavior therapy for borderline personality disorder because people with borderline personality disorder suffered from poor emotional regulation in their interpersonal relationships.

There are many maladaptive behaviors (including many symptoms of borderline personality disorder diagnosis), such as impulsive behavior, that have been reinforced in these people. According to the research, dialectical behavior therapy plays an important role in reducing suicide attempts and depression, increasing control and reducing anger before it happens, as well as reduced self-harm.

Schema therapy is another psychological treatment that can have a positive effect on the symptoms of borderline personality disorder. Schema therapy has been developed for the treatment of patients with chronic cognitive behavior problems; these patients have not got enough help from the classical cognitive-behavioral therapy. The treatment is a good choice for many patients with disorders of Axis 1 and 2 who have long-term cognitive behavior problems related to the cognitive character. According to this model, the schemas are at the core of personality disorders, and behavioral patterns in DSM are mainly responses to the central scheme. The main goal of treatment in patients with cognitive behavior problems is to improve the schema.

Taking into account the effectiveness of schema therapy and dialectical behavior therapy in reducing the symptoms of borderline personality disorder, the present research aimed to study and compare the effect of these treatments on people who commit suicide. Physical therapists and crisis intervention experts can make benefit from the findings of the study. Therefore, the present study was set out to find out how and to what extent each of these schema therapy treatments and dialectical behavior therapy could improve the mood activity and suicidal thoughts in borderline personality disorder.

Materials and methods

The research method was a quasi-experimental one. The experimental group was trained in two groups in the field of dialectical behavior therapy and Schema Therapy, while the control group received no intervention. The population in this group included all patients with borderline personality disorder who lived in the city of Qazvin in 2015. The sample included 36 cases of female patients with borderline personality disorder who referred to Bou-Ali Hospital in Qazvin they were selected using the convenience sampling method.

The patients were randomly divided into three 12-person groups; the first group received dialectical behavior therapy intervention, the second group got schema therapy received Dialectical behavior therapy intervention, and the control group received no intervention. Exclusion criteria in the samples were related to the patients who had committed sui-
Scoring on a scale value of 0 to 3. Higher total scores would indicate more severe depressive symptoms. The standardized cutoffs used differed from the original: 0-13: minimal depression, 14-19: mild depression, 20-28: moderate depression, 29-63: severe depression.

The BDI-II is positively correlated with the Hamilton Depression Rating Scale with a Pearson r of 0.71, showing a good agreement. The test was also shown to have a high one-week test–retest reliability (Pearson r =0.93), suggesting that it was not overly sensitive to the daily variations in mood (16). The test also had high internal consistency (α=0.91)(15).

4) The Scale for Suicide Ideation (SSI) of Mach:
This scale was designed by Beck et al., (1979). A tester has a questionnaire with 19 items. Each question has three choices with zero, one and; two scores. Totally, scores range from zero to 38 (based on the presence or absence and different stages of ideation to the suicide act). The scores in the range of 0-3 show no suicide ideation, the 4-11 range represent the low risk suicide ideation and scores 12-38 stand for the risky suicide ideation. Translations, adaption and initial study on Mach are performed in recognition and behavior studies of Rusbeh Hospital. The studies verified the content validity and the relative reliability of the Persian version of this questionnaire in the Iranian population. The studies of Kaviani et al., (2001) verified the content validity and the relative reliability of the Persian version of this questionnaire in the Iranian population.

Methods of study: After selecting, the subjects were randomly divided into three 12-people groups: two experimental groups and one control group; the Beck Depression Inventory and Scale suicide imagination Mach (SSIM) were used as the pre-experimental. Then, two experimental groups were trained by a psychologist under dialectical behavior therapy and schema therapy in 16 sessions for 90 minutes, while the control group received no intervention. After the intervention, the post- experimental was collected from three groups.

Topics of the dialectical behavior therapy sessions included: the first and fifth session: Mindfulness based on the symptoms control, second and sixth meetings: expression and emotion regulation, third and seventh sessions: Stress Tolerance, and the fourth and eighth sessions: training Interpersonal skills. Also, the topics of the Schema therapy sessions were as follows:
First session: introduction took place and the subjects were interviewed.

The second and third sessions: the pre-experimental took place, and cognitive techniques with homework were on the agenda.

Fourth and fifth sessions: Mental imagery, the conversation, limited parental relations, depending on the type of scheme, were used.

Sixth and seventh sessions: the guided imagery of the problematic position, Relationship Therapy, relationships with important people in life and role-playing were employed.

Eighth Session: Analysis and implementation of the post-experimental were performed. Because of moral considerations, the consent of participants in the research was got from their families. Also, they were assured that their information would remain confidential.

Results

In total, 36 patients with borderline personality disorder and mood activity and suicidal thoughts were studied; the mean and standard deviation of the variables in groups 1, 2 and the control group are presented in Table 1.

Multivariate analysis of variance was used to investigate the differences between the dependent variables. Before applying this analysis, the assumptions underlying its use, including normal distribution of variables, the same slope of the regression line, and the homogeneity of variances, were investigated; all of them were met. Table 2 shows the results of the analysis of the homogeneity of variances (Levene experimental).

According to the results in Table 3, the effect of group according to the amount of F reported at 0.05, was significant. Table 4 summarizes the results of the independent t-test to examine the significance of difference between the means for the dependent variable.

### Table 1: The mean and standard deviation of the variables of research in groups 1, 2 and the control group.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>mood activity</td>
<td>DBT group</td>
<td>55</td>
<td>3.93</td>
<td>57</td>
<td>4.44</td>
<td>54.91</td>
<td>3.08</td>
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<tr>
<td></td>
<td>ST group</td>
<td>24.16</td>
<td>2.7</td>
<td>19.83</td>
<td>1.55</td>
<td>53.75</td>
<td>2.13</td>
</tr>
<tr>
<td></td>
<td>Control group</td>
<td>15.25</td>
<td>1.65</td>
<td>14.33</td>
<td>1.55</td>
<td>31</td>
<td>0.96</td>
</tr>
<tr>
<td>suicidal thoughts</td>
<td>DBT group</td>
<td>33.41</td>
<td>1.5</td>
<td>31.83</td>
<td>1.52</td>
<td>31.58</td>
<td>1.24</td>
</tr>
<tr>
<td></td>
<td>ST group</td>
<td>15.25</td>
<td>1.65</td>
<td>14.33</td>
<td>1.55</td>
<td>31</td>
<td>0.96</td>
</tr>
</tbody>
</table>

### Table 2: The results of the analysis of the homogeneity of variances (Levene experimental).

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable Type III Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
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<tr>
<td>Group</td>
<td>Post-test of mood activity</td>
<td>25.007</td>
<td>2</td>
<td>12.504</td>
<td>4.318</td>
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<tr>
<td></td>
<td>Post-test of suicidal thoughts</td>
<td>5.124</td>
<td>2</td>
<td>2.562</td>
<td>4.246</td>
</tr>
</tbody>
</table>

### Table 3: MANCOVA results related to the variables of mood activity and suicidal thoughts in three control groups and 1 and 2 experimental groups after controlling the pre-test.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Therapy Type</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>mood activity</td>
<td>DBT</td>
<td>19.83</td>
<td>1.528</td>
<td>3.034</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>ST</td>
<td>24.17</td>
<td>4.707</td>
<td></td>
<td></td>
</tr>
<tr>
<td>suicidal thoughts</td>
<td>DBT</td>
<td>15.25</td>
<td>1.658</td>
<td>1.396</td>
<td>0.663</td>
</tr>
<tr>
<td></td>
<td>ST</td>
<td>14.33</td>
<td>1.557</td>
<td></td>
<td></td>
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</tbody>
</table>

Table 4: summary of the results of the independent t-test to examine the significance of difference between the means for the dependent variables.
Thus, there was a significant difference between schema therapy and dialectical behavior therapy in patients with borderline personality disorder in terms of the mood activity variable at the level 0.01. But the results showed that there were no significant differences between schema therapy and dialectical behavior therapy in patients with borderline personality disorder in terms of the suicidal thoughts variable (P<0.001).

**Discussion**

The results showed that dialectical behavior therapy and schema therapy could have a significant effect on reducing mood activity and suicidal thoughts in patients with the borderline personality disorder. Also, in terms of the above variable, there was no significant difference between schema therapy and dialectical behavior therapy in terms of their effectiveness. The findings of this research are consistent with the studies conducted by Zamani, Ataei and Mirshekari⁷, Lynch, Shionz, Kokroviz, Trop, Brunner and Bear⁸, Mohammadi, Dadkhah, Mozafari and Molaei⁹, Alizadeh et al⁹, Abolghasem and Jafari⁹, Aghayousefi, Tarkhani and Ghorbani¹⁰, and Dykhavt and Arnetz¹¹.

In explaining the results obtained in the present study, we can say that, people with borderline personality disorder have hard experiences in emotion regulation, interpersonal relationships and stress tolerance. Most of these people have faced the suicidal behavior to reduce negative emotions. Intense negative emotions and the inability to modify are very important for their self-harm behavior and very few of them respond to the psychiatric drug treatments⁹. Suicidal behaviors are considered as symptoms for solving maladaptive problems and the result of the lack of alternative behaviors¹². Thus, dialectical behavior therapy is related to training behavioral skills and replacing adaptive behaviors rather than the maladaptive behaviors.

Mood activity in patients with borderline personality disorder have characteristics such as extreme impulsivity behaviors, driving in a forth-right way, sexual promiscuity, destructive and dysfunctional interpersonal relationships (for example, doing sexual abuse within the family, or acceding to abuse and emotional exploitation by an sexual or emotional partner), risky behaviors, substance abuse, eating disorders, depression and thoughts of suicide, homelessness, long-term unemployment courses, interpersonal problems, and dissociative symptom that are associated with a lack of emotional control. For example, previous studies have shown that those with dissociative tendencies in their behavioral repertoire may respond to traumatic events with automatic dissociative patterns, even in response to milder stressors or reminders of the original trauma²⁴. Therapist teaches the patient that these behaviors are harmful, and makes clear, why the behaviors that are detrimental to treatment; should be stopped. Thus, the first strategy in dealing with such a behavior is commitment to change.

These behaviors are disturbing the patient’s quality of life, an issue discussed between patient and therapist²⁵. Therapist teaches the patient that mood activity can be harmful, and makes clear, why the behaviors caused by it are detrimental to the treatment and should be, therefore stopped… Thus, the first strategy in dealing with such behavior is commitment to change. This issue that which of behaviors are disturbing the patient quality of life is an issue that is discussed between patient and therapist Interpersonal skills including training, distress to tolerance skills (discomfort), emotion regulation skills, and Central mindfulness skills are considered as behavioral skills that are taught in this treatment of the patient. Emotional irritability is the main characteristic of BPD. Therefore, emotion regulation skill training has a key role in the treatment of this disorder.

Another important issue is training distress tolerance, which can prepares the patient to accept and deal with painful emotions at the same time²⁶. Therefore, a dialectical action takes place between two groups of skills. Training skills and accreditation by the therapist can increases the patient's sense of self-confidence due to the feeling that he understands surroundings exactly. Moreover, achieving individual goals, resolving feelings of inadequacy and coming to a feeling of relief and happiness are other objectives of dialectical behavior therapy.

From the perspective of Yang’s schema therapy, any individual forms some schemes during his childhood. Schema is an organized notice structure formed in childhood and reflected in behaviors, feelings and thoughts. A patient with borderline personality disorder may make change in his intense emotional mood in a very short time. Based on the schema mentality model, this is due to the positional and uncontrollable changes of the patient which occur sequentially from one mentality to another²⁸.
Therapist explains the mentality of a schema for the patient. If the therapist provides mentality in a personalized manner to patients, most patients with borderline personality disorder understand them very fast and well. The important thing is that we talk about mentality in practice so that we considered it as a personality. It is therapeutically useful because it helps patients to stay away from the minds, and see them. The general approach of therapist is to follow moment-to-moment mentality during the session; and therefore, uses the appropriate strategies for each of mentality. The therapist acts as a good parent. The goal is that the healthy adult mentality of the patient be grown and supported by modeling, because this mentality takes care of abandoned children, trumps the punitive parents, supplants them, and teaches the angry child the healthy ways to express emotions and needs. Abandoned children are a part of the patients who, according to the theory of schema therapy in the main family origins, have been abused and deserted; they have been abandoned and suffer from emotional deprivation; obedience and draconian punishments are also discussed in this regard.

Also, the dialectical treatment in this study was equally effective in reducing the symptoms of suicidal thoughts in patients with borderline personality disorder, as compared with schema therapy. But with regard to the mood activity variable, the study showed that there was no significant difference between the two independent variables. It seems that these treatments, by understanding the characteristics of the patients with borderline personality disorder, have shaped their nature in order to reduce the symptoms of this disorder. So, it would be possible to control or reduce the mood activity and suicidal thoughts equally.

Some limitations of this study brought here: the sample was limited to the female patients with borderline personality disorder, and it was done in the city of Qazvin; the other limitation was the impossibility of conducting a longitudinal study because of the protracted nature of internalizing independent variables. It is suggested that in future studies, the effectiveness of schema therapy and dialectical treatment of patients with borderline personality disorder be investigated separately on men and women. Also, the effectiveness of the mentioned treatments could be separately examined on other personality disorders.

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Corresponding author
BEHNAM MAKVANDI, Assistant Professor, Department of Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz (Iran)